

Alexander Mills

Senior Software Engineer + DevOps

San Francisco, CA

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Important Links / URLs

[LinkedIn](#)

<https://www.linkedin.com/in/alexanderdmills>

[StackOverflow](#)

(65k+ points !!)

<https://stackoverflow.com/users/1223975/alexander-mills>

[unix.stackexchange.com](#)

(7k+ points)

<https://unix.stackexchange.com/users/113238/alexander-mills>

[Github](#)

(200+ repos)

<https://www.github.com/oresoftware>

Summary

Well-rounded and outgoing software developer with 9+ years experience in engineering and product design. Experienced in both B2B and B2C industries, and with government contracting. *Expert with Node.js, TypeScript, Golang and all things Docker.* Looking for interesting work *only in the San Francisco area (but open to remote work)*. Prefer back-end software roles, including devops, SRE, data engineering, release engineering, platform engineering, etc.

Very experienced with AWS and GCP, and to a lesser extent Azure. Generally speaking I am most excited by companies that are oriented towards hardware, tangible goods, IoT, quantitative/financial, video/audio platforms, mobile-first. My primary skills involve creating full-stack apps with JavaScript and Node.js, Java, shell-scripting, Docker, relational and non-relational databases, operations research, system architecture, and some data science. My goal is to work in software development and engineering – and although an eventual move into management may be inevitable, I'd like to always be doing some engineering work. Expert in testing software, and experienced with CI/CD and deploying software on multiple platforms.

I am motivated by interesting projects that do good in the world. Top 1% on StackOverflow since 2015. Very active on Github and have written and published a ton of OSS, developing many libraries and SDKs. Certified to work on both AWS and GCP platforms (see certifications section below). I view software as a means to achieve engineering feats, but academically I am interested in functional languages, and strive to write clean code, following functional programming best practices.

Technical / Software Skills

Software Languages and Libraries

Backend: Node.js / TypeScript, Golang, Java, Bash/Shell

Frontend (Web): JS, React, Angular, RxJS, ReasonML

Currently learning: Erlang / Elixir, OCaml, Rust, Scala

Software Testing

JUnit, Mocha, Karma, Selenium

Deployment, monitoring, continuous integration, hosting, PaaS / SaaS

AWS (EKS, ECS, EC2, S3, RDS, etc), GCP, Docker, Jenkins, TravisCI, OpenShift / OpenStack, CircleCI, Heroku, various CDNs including JFrog / Artifactory, Kubernetes

Databases, Datastores

Relational: Oracle RDBMS (PL/SQL), MySQL / MariaDB, SQLite, Postgres

Non-relational: MongoDB, DB4O (an object database), Redis

Work Experience

Interos Solutions, Inc.

Devops and Platform Engineer

San Francisco, CA

March 2019 - Present

- Devops for start-up firm based out of Northern Virginia, with an arm in Silicon Valley.
- Worked with AWS to deploy our software, using AWS services including EC2, EKS and ECS to deploy containerized applications.
- Deployed, monitored, audited our software for security, best practices, compliance with federal law, etc.
- Managed CI/CD pipelines for our software deployment process using standard tools like Jenkins, and code repositories including Bitbucket, Github and content delivery services like AWS S3.
- Conducted application development for several Node.js and Python codebases and wrote tooling with TypeScript, Python, Bash for all sorts of things, including jenkins jobs, front-end apps, and full-fledged microservices for internal use.

Moover

Devops, Software Developer (Co-founder and CTO)

San Francisco, CA

May 2016 - Dec. 2018

- Worked in capacity of CTO and full-stack dev working with Node.js and front-end JS.
- Modernizing the moving ("mooving") industry! Writing/testing/deploying full-stack JS applications via AWS.
- Consumer-facing web + mobile application to provide real-time and on-demand moving ("mooving") services; involved both B2B and B2C aspects (where the B2B side required working with local moving companies).
- Managed deployment on Elastic Beanstalk, as well as deployment to Firebase. Front-end development was done with React.
- Worked part-time and full-time after I left Cisco; worked in the capacity of CTO after previous CTO left.

Cisco

Lead Developer, Devops

San Francisco, CA

Feb. 2017 - June 2018

- Lead developer on full-stack JS project (MEAN stack), managing our CI/CD pipelines, doing all the devops work, both front-end and back-end testing, and acting as the project DBA as well.
- The project involved web applications targeting internal and external Cisco customers in order to improve the acquisition process (working as part of the M&A team at Cisco).
- Applications involved real-time features requiring advanced knowledge of websockets and MongoDB, which I had gained on previous jobs.
- Migrated our apps from Angular 1.0 to Angular 2.0 before I left, upgrading everything to TypeScript in the process.
- Lead our team in moving from OpenShift version 2 to version 3; effectively moving from VMs to containers.

Autodesk

Software Developer (3-month contract)

San Rafael, CA

Aug. 2016 - Nov. 2016

- Short-term contract to develop low-latency RESTful APIs with Node.js using the StrongLoop / Loopback framework.
- Used Loopback framework to develop a data-first methodology to develop APIs - (postgres tables drove the codebase; the codebase did not generate the tables).
- Incorporated the built-in data-access / access-control features of Loopback.

Lectal

Software Developer (Co-founder)

Palo Alto, CA

Aug. 2015 - Aug. 2016

- Lectal was a small early-stage startup, making consumer web applications.
- Writing/testing/deploying full-stack JS applications deployed via Heroku and later AWS; (MEAN stack).
- Customer-facing social-networking news app with sophisticated AI components designed to optimize news experience for everyone!
- Created several open-source Node.js modules for scaling servers to fit our needs.
- Created custom service to tail the MongoDB oplog to provide scale-able solution to update Algolia search indexes.
- 3rd party integrations with Cloudinary, Algolia, Facebook, Twitter, etc.

Comcast

Software Developer

Sunnyvale, CA

Apr. 2015 - Apr. 2016

- Worked at Comcast's Silicon Valley research arm. (Formerly Comcast Labs, now called Comcast Silicon Valley Innovation Center).
- Used full-stack JavaScript to create internet of things (IoT) solutions; using big data to close the customer service loop.
- Wrote and deployed Node.js *rules-engine* services which handled up to 250 requests per second for all Comcast business across the USA; used Redis for caching data.
- Created full-stack universal / isomorphic JavaScript management and admin web applications using React.js.
- Mentored and pair-programmed with junior developers; left Comcast to work at Lectal full-time.

TASC

Java and Oracle Developer

Washington, DC

June 2010 - Jan. 2014

- As a junior to mid-level developer on a multi-million dollar project, I developed and deployed a major Java-based software project to hundreds of government customers.
- Coded more than 80% of the time on a day-to-day basis, and 60% of that time in Java, 40% with Oracle PL/SQL.
- Developed, maintained, debugged, and optimized Java and Oracle PL/SQL, using the Eclipse IDE and Oracle SQL Developer. Wrote unit tests using JUnit for the majority of the Java classes I wrote.

The Research Foundation of the State University of New York

Researcher / Author

Buffalo, NY

Aug 2008 - Nov. 2010

- Lead author of conference (GITMA, Mexico City, 2009) paper and published journal (JIPS) paper on disaster mitigation. (See: Publications, below.) This paper has 70K citations.

Formal Education

University at Buffalo, SUNY

B.S. Industrial and Systems Engineering

GPA 3.5/4.0, (3.8 in major) / Honors: Tau BetaPi, Cum Laude

May 2010

Certifications / License

- [Google Certified Associate Cloud Engineer \(expected 2021\)](#)
- [AWS Certified Solutions Architect \(expected 2021\)](#)
- USSF D/E Soccer Coaching license

Open Source Software

- <https://www.npmjs.com/~oresoftware>
- <https://github.com/oresoftware>

Publications

- **"The World Might be Missing a Programming Language"** (url: <https://medium.com/better-programming/the-world-might-be-missing-a-programming-language-4ce43e212277>)
- **"Web 2.0 Emergency Applications: How Useful Can Twitter Be in Emergency Response?"** (Journal of Information Privacy and Security, Volume 5, Issue 3, 2009)
- **"Hot-reloading in 2017, using React + RequireJS (and Node.js, of course)"**
(url: <https://medium.com/@the1mills/hot-reloading-with-react-requirejs-7b2aa6cb06e1>)
- **"Front-end JavaScript testing with Istanbul and Selenium"**
(url: <https://medium.com/@the1mills/front-end-javascript-test-coverage-with-istanbul-selenium-4b2be44e3e98>)
- **"How to test your new NPM module without publishing it every 5 minutes"**
(url: <https://bit.ly/2CNORf0>)

(end of Alex's resume)